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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,006	10/26/2000	Hiroki Doi	0717-0448P	3457

7590 07/24/2003

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EXAMINER

LAIR, DONALD M

ART UNIT PAPER NUMBER

2858

DATE MAILED: 07/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/696,006

Applicant(s)

DOI ET AL. 

Examiner

Donald M. Lair

Art Unit

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 July 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: Arguments are attached.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

  
N. LeSupervisory Patent Examiner  
Technology Center 2800

## ADVISORY ACTION

### *Response to Arguments*

1. The response filed on 07/02/03 under 37 CFR 1.131 has been considered but is ineffective to overcome the Kalb, Jr. reference.
2. The amended claim language of Claims 1 and 17 fail to accurately describe the features that create the differences between Kalb, Jr. and the current Application. While the limitation of "... so that a driving current driving at least one Hall device of the plurality of Hall devices is a current adjusted amount of a driving current driving another Hall device through a corresponding terminal of the plurality of terminals." could be interpreted to describe the constant supplies providing an additional current to each of the Hall devices, as shown in Fig. 1. It could also be easily interpreted to describe the invention of Kalb, Jr. wherein a current adjusted amount could be due to a current drop in the Hall device and the output current then drives the next Hall device.
3. According to the MPEP (section 2106) claims are to be given their ***broadest reasonable interpretation*** in light of the supporting disclosure (*In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997)) and that limitations appearing in the specification but not recited into the claim are not read into the claim (*In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)).
4. The Applicant submits that

"Kalb, Jr. fails to teach the structural limitation of "a driving current ... is a current adjusted amount ... through a corresponding terminal of the plurality of

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terminals,” in the context of terminals applying a bias voltage to a plurality of Hall devices connected in series”;

and

“... the device does not consist of a plurality of terminals for applying the bias voltage. Rather, Kalb teaches at most a single terminal that supplies a reference voltage.”

5. However, it is clearly reasonable to interpret Kalb, Jr. in this manner. Specifically, Kalb, Jr. does in fact teach applying a bias voltage to the plurality of terminals. Column 3, lines 25 and 26 read as “... the gate of a first MagFET is configured to be biased at a reference voltage...”, Column 4, lines 35 and 36 read as “... each of the MagFETs are configured to operate at threshold.”, and finally Column 5, lines 11 – 31 clearly show that each of the MagFETs are biased to a reference voltage through a corresponding terminal.

6. In Page 3, paragraph 2, the Applicant states that the Kalb reference “do[es] not, as in the claimed invention, serve to adjust the current driving another Hall device, i.e. because there is no current flowing through each of the devices.” Even if one were to interpret the claim language the way the Applicant is, which is not the broadest reasonable interpretation, the Kalb reference discloses a configuration wherein current flows directly from one hall device to a next hall device as prior art, referring to Fig. 2 and in Column 2, line 42 – Column 3, line 2.

7. Regarding the Applicant’s arguments referring to the 35 U.S.C § 103 rejections, the Applicant states “Foster does appear to teach a constant voltage driving system for a Hall device” (Response: Page 4, paragraph 4). The Examiner agrees with this statement. The Applicant further states “Foster’s device is not temperature dependent... Foster’s device includes

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one voltage regulator for one Hall device.” It is unclear how these statements relate to the claim language in question. The Applicant goes on to state “However, like Kalb, Jr. Foster’s device also fails to teach a plurality of Hall devices connected in series in combination with a constant voltage supply section for supplying a constant bias voltage to each of the plurality of Hall devices” but while the Applicant has stated that he does not concede that the Hall devices disclosed by Kalb, Jr. are series connected he has also failed to argue convincingly that they are not series connected. The Applicant states that “In Foster’s device, the Hall devices are connected in parallel. Thus, in either Kalb, Jr. or Foster the system would require a driving current in proportion to the number of Hall devices.” The Applicant has given neither a specific area within the respective disclosures to support these statements, or an explanation as to why these arguments are relevant to the claim language. Further, the applicant has failed to make a thorough and convincing argument against the motivation to combine the Kalb, Jr. and Foster references.

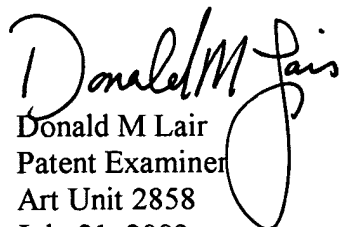
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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald M Lair whose telephone number is (703) 305-4450. The examiner can normally be reached on Monday - Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1436.

  
Donald M Lair  
Patent Examiner  
Art Unit 2858  
July 21, 2003